

SOV/124-57-4-4663

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 4, p 114 (USSR)

AUTHOR: Mazitov, Sh. S.

TITLE: Effect of an Intermediate Mass on the Forces and Stresses Arising in
a Rod Upon Longitudinal Impact (Vliyaniye promezhutochnoy massy
na ~~z~~siliya i napryazheniya v sterzhne pri prodol'nom udare)

PERIODICAL: Izv. Otd. yestestv. nauk. AN TadzhSSR 1956, Vol 15, pp 53-59

ABSTRACT: Bibliographic entry

Card 1/1

SOV/124-58-3-3214

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 3, p 99 (USSR)

AUTHOR: Mazitov, Sh. S.

TITLE: Influence of Transverse Vibrations on the Stress and Strain of a Beam Subjected to Longitudinal Impact (Vliyaniye poperechnykh kolebaniy na napryazheniya i usiliya v sterzhne pri prodol'nom udare)

PERIODICAL: Izv. Otd. yestestv. nauk AN TadzhSSR, 1956, Nr 16, pp 3-13

ABSTRACT: Experimental data are given on the determination of stress conditions in the middle cross section of a pin-ended beam subject to a longitudinal impact. Investigations showed that the stresses in the most deformed outer fibers increase by about 3% as the result of transverse vibrations. A theoretical evaluation of the transverse vibrations energy of the beam is given, and it is demonstrated that this energy is also relatively small - of the order of 1% of the total energy of the impact. Thus the practice of disregarding the effect of transverse vibrations of a beam subject to longitudinal impact is substantiated.

N. F. Lebedev

Card 1/1

MAZITOV, Sh.S.

Evaluation of the quality and quantity of strains and stresses in shafts in longitudinal impact, according to the resilience of shaft support. Dokl. AN Tadzh.SSR no.16:41-52 '56.

(MLRA 9:11)

1. Otdel khlopkovodstva Akademii nauk Tadzhikskoy SSR.
(Shafts and shafting)

SOV/124-57-8-9663

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 8, p 148 (USSR)

AUTHOR: Mazitov, Sh. S.

TITLE: An Experimental Method for the Determination of the Impact Force in Machine Parts (Eksperimental'nyy metod opredeleniya sily udara v detalyakh mashin)

PERIODICAL: Dokl. AN TadzhSSR, 1956, Nr 16, pp 53-64

ABSTRACT: The paper gives an example of the experimental investigation of the forces developing during the impact of a load on a beam. The impact was accomplished by means of a steel dynamometer probe with two electrical resistance strain gages glued to its lateral walls. The electro-dynamometer thus obtained was first subjected to static calibration. The fixation of the resistance changes in the strain gages was accomplished by means of an electronic oscillograph. The author also gives an example of the determination of the impact forces when the resistance strain gages were glued directly to the beam subjected to the impact which had also been previously calibrated by a static load. The accuracy of the measurements in such experiments depends to a great extent on the characteristics of the amplifying equipment, which

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An Experimental Method for the Determination of the Impact Force (cont.)

unfortunately the paper does not specify. The author is mistaken in his belief that the determination of the impact forces through the stress by introducing the modulus of elasticity into the calculation serves as proof of the accuracy of the results of an experimental investigation. Inasmuch as such determination is made with the use of the same oscillograph readings, no verification of the accuracy of the experimental investigation is thereby accomplished.

A. D. Pospelov

Card 2/2

MAZITOV, Sh.S., kandidat tekhnicheskikh nauk; ISAYEV, S.I., inzhener,
redaktor; MASHNEVSKIY, G.K., tekhnicheskiiy redaktor

[Engineering methods for computing the impact strength of machine
parts] Inzhenernye metody rascheta detalei mashin na prochnost' pri
udare. Stalinabad, Tadzhikskii sel'khoz. in-t, 1957. 193 p.
(Machinery--Design) (Impact) (MLA 10:9)

MAZITOV, Shamil' Salakhutdinovich; PONOMARENKO, A.A., red.; KUCHINSKIY, V.,
red.; POLTORAK, I., tekhn.red.

[Checkrow planting of cotton] Kvadratno-gnezdovoi posev khlop-
chatnika. Stalinabad, Tadzhikskoe gos. izd-vo, 1958. 14 p.
(MIRA 12:1)

1. Zaveduyushchiy otделom mekhanizatsii nauchno-issledovatel'skogo
instituta zemledeliya Ministerstva Sel'skogo Khozyaystva Tadzhikskoy
SSR (for Mazitov).

(Cotton growing)

MAZITOV, Sh.S.; RAKHMANOV, M.K.

Studying the operation of the new vertical-spindle cotton
picker. Izv.Otd.est.nauk AN Tadzh.SSR no.2:109-112 '58.
(MIRA 13:4)

1. Tadzhikskiy sel'skokhozyaystvennyy institut.
(Cotton-picking machinery)

MAZITOV, Sh.S.

Designing rods of stamping hammers for strength. Izv. Otd. est.
nauk AN Tadzh. SSR no.1:3-14 '59. (MIRA 13:3)

1. Tadzhikskiy sel'skokhozyaystvennyy institut.
(Forging machinery)

MAZITOV, Sh.S.; KRYUKOV, V.I.

New design of a frontal grass mower in Tajikistan. Izv.
Otd. est. nauk AN Tadzh. SSR no.3:131-137 '59. (MIRA 15:5)

1. Otdel mekhanizatsii AN Tadzhikskoy SSR.
(Tajikistan—Mowing machines)

GEROVICH, M.A. [deceased]; KAGANOVICH, R.I.; MAZITOV, Yu.A.; GOROKHOV, L.N.

Mechanism of ozone formation in the electrolysis of concentrated perchloric acid solutions. Dokl. AN SSSR 137 no.3:634-637 Mr. '61.

(MIRA 14:2)

1. Moskovskiy gosudarstvennyy universitet im.M.V.Lomonosova. Predstavleno akademikom A.N.Frumkinym.

(Ozone)

(Perchloric acid)

MAZITOV, Yu.A.; ROZENTAL', K.I.; VESKLOVSKIY, V.I.

Ionization of oxygen over palladium. Dokl. AN SSSR 148 no.1:
152-155 Ja '63. (MIRA 16:2)

1. Fiziko-khimicheskiy institut im. L.Ya. Karpova. Predstavleno
akademikom A.N. Frumkinym.
(Oxygen) (Ionization) (Electrodes, Palladium)

ACCESSION NR: AP4011448
AUTHORS: Mazitov, Yu. A. (Moscow); Roszental', K. I. (Moscow);
Veselovskiy, V. I. (Moscow)
S/0076/64/038/001/0151/0155

TITLE: Anodic formation and cathodic removal of oxides on palladium
SOURCE: Zhurnal fiz. khim, v. 38, no. 1, 1964, 151-155

TOPIC TAGS: anodic palladium oxidation, cathodic palladium reduction
ABSTRACT: The scarcity of work on the anodic behavior of Pd prompted this study. The authors investigated the formation and reduction of palladium oxides in 10.6 N KOH at different temperatures by plotting the curve of cathode charge after prior polarization of the electrode with different potentials. It has been found that beginning with 1.05 v anode potential, the Pd surface becomes coated with a divalent Pd oxide, or at the potential of oxygen liberation with two different oxides. It is supposed that the second is a peroxide. The rate of oxide decomposition rises with the temperature, and the stability of the first oxide is greater than of the second. It was found that the slope of the Tafel equation for cathodic reduction of both oxide

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ACCESSION NR: AP4011448

is 55 mv. The formation of an overvoltage resulting from the reduction of the second oxide has been observed and it is attributed to concentrated polarization in the oxide layer. Orig. art. has: 3 Figures

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova /
(Physico-chemical Institute)

SUB CODE: OH

DATE ACQ: 14Feb64

KNOL: 00

SUBMITTED: 17Apr63

NR REF SOV: 001

OTHER: 011

2/2

Card

MAZITOV, Yu.A.; ROZENTAL', K.I.; VESELOVSKIY, V.I.

Ionization of oxygen at a three-phase boundary in alkaline
solutions. Zhur. fiz. khim. 38 no.2:449-455 F '64.
(MIRA 17:8)

1. Fiziko-khimicheskiy institut imeni Karpova.

MAZITOV, Yu.A.; ROZENTAL', K.I.; VESELOVSKIY, V.I. (Moscow)

Ionization of oxygen at a three-phase boundary in alkaline
solutions. Zhur. fiz. khim. 38 no.3:697-701 Mr '64.
(MIRA 17:7)

1. Fiziko-khimicheskiy institut imeni L.Ya. Karpova.

L 48567-65 SWY(1)/DWD(2)/2 ENN 20
17 B
ACCESSION NR: AP5007748 S/D364/65/001/001/0036/0040
AUTHOR: Mazitov, Yu. A.; Rozental', K. I.; Veselovskiy, V. I.
TITLE: Ionization of oxygen at the silver electrode in alkali solutions
SOURCE: Elektrokimiya, v. 1, no. 1, 1965, 36-40
TOPIC TAGS: ionization, oxygen, cathode polarization
ABSTRACT: The reduction of oxygen at silver microelectrodes in concentrated base solutions was studied at various temperatures. The polarographic method was used. The electrodes were imbedded in glass and consisted of pieces of silver wire 0.5 mm in diameter with a visible surface of about 0.1 cm². A three electrode cell provided with a jacket for thermostatic control made it possible to take polarographic relationships using a potentiostat with the simultaneous passage of a gas into the

relationships using a potentiostat with the simultaneous passage of a gas into the electrolyte. Mixing was accomplished with a magnetic stirring rod made of a magnet covered with glass or polyethylene. An ultrathermostat having an accuracy of $\pm 0.1^{\circ}\text{C}$ was used for thermostatic control. The comparison electrode was a hydrogen palladium electrode in a basic solution of the same concentration at 22°C . The

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L 48967-65

ACCESSION NR: AP5007748

electrolyte was KOH from the "Kal'baum" firm or a highly pure KOH solution with a content of $2.4 \cdot 10^{-5}$ iron, $7 \cdot 10^{-4}$ chlorides, and $5 \cdot 10^{-2}$ % mercury. Before the tests the electrolyte was further purified by prolonged cathode polarization at a large platinum electrode in a hydrogen atmosphere although the results did not change if such purification was not done. The potential recorder for the potentiostat was an

surface the polarographic curves
figures.

ASSOCIATION: Fiziko-khimicheskiy institut imeni L. Ya. Karpova (Physical-Chemical
Institute)

SUBMITTED: 10Jun64

ENCL: 00

SUB CODE: GC

NO REF SCV: 009

OTHER: 001

TP
Card 2/2

Card 2/2

MAZITOV, Yu.A.

Oxygen ionization at the three-phase boundary in alkaline solutions. Specific conditions of ionization and the process distribution along the film length. Elektrokhimiya 1 no. 7 218-223 1965. (MIRA 12 6)

1. Fiziko-khimiicheskiy Institut Lenini Skopova, Moskva.

L 41384-65 EPF(c)/EPF/EWG(j)/EWT(m)/EWG(m)/EWP(b)/T/EWP(t) Pr-4/Ps-4 IJP(c)
RWH/JD S/0364/65/001/003/0340/0345 36

ACCESSION NR: AP5009304 35

AUTHOR: Mazitov, Yu. A. B

TITLE: Reduction of oxygen on a three-phase boundary in alkaline solutions. Width of the reaction zone and concentration of hydrogen peroxide 27

SOURCE: Elektrokhimiya, v. 1, no. 3, 1965, 340-345

TOPIC TAGS: electrochemistry, oxygen reduction, hydrogen peroxide, three phase boundary, electrode polarization, gas ionization, silver electrode, platinum electrode, palladium electrode

ABSTRACT: The measurement of the polarization characteristics of partly immersed electrodes makes it possible to determine important parameters of the ionization of electrodes in which an electro-

State Council
given to new possibilities of studying the fine structure
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L 41384-65

ACCESSION NR: AP5009304

associated with a sharp increase in the diffusion flow of oxygen to the electrode surface,
offered by the method of partial electrode immersion. The ionization of
electrodes made of silver, platinum, compared

associated with a sharp increase in the possibilities offered by the method of partial electrode immersion. oxygen was investigated on partially immersed electrodes made of silver, platinum, palladium, and a silver (90%) - palladium (10%) alloy, and the results were compared with those obtained for completely immersed electrodes. It was shown that the end product of the overall process of oxygen reduction could be changed as a function of the diffusion flow of oxygen. Cathodic prepolarization was found to cause a sharp increase in currents on partially immersed electrodes, this being associated with a decrease in the steady-state concentration of hydrogen peroxide in the reaction zone and a narrowing of the latter. Orig. art. has: 5 figures.

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova (Physicochemical Institute)

SUBMITTED: 10Jun64

ENCL: 00

SUB CODE: IC

NO REF SOV: 008

OTHER: 005

cc
Card 2/2

L 40342-66 EWP(j)/EWT(m)/T/EWP(w)/EWP(t)/ETI IJP(c) RM/DS/JD
 ACC NR: AP6018985 (A) SOURCE CODE: UR/0364/66/002/006/0749/0750
 AUTHOR: Mazitov, Yu. A. 32
 ORG: Physicochemical Institute imeni L. Ya. Karpov, Moscow (Fiziko-khimicheskiy insti-
 tut) B
 TITLE: Electrochemical method of determining the ohmic resistance and thickness of
 electrolyte films on metals 6
 SOURCE: Elektrokhimiya, v. 2, no. 6, 1966, 749-750
 TOPIC TAGS: electrolyte, surface film, platinum
 ABSTRACT: The resistance and, if the conductance of the electrolyte is known, the
 thickness of the film on the inner surface of pores in a porous electrode can be deter-
 mined at various temperatures by measuring the dependence of the hydrogen ionization
 current at a partially immersed electrode on the position of the meniscus of the elec-
 trolyte. The proposed method consists in measuring the distance between the edge of
 the meniscus and the reaction zone against the potential (while the length of the non-
 immersed part of the electrode is gradually decreased). By using this method, it was
 found, for example, that on a smooth platinum electrode, after the meniscus had been
 lowered, a film of 10.6 N KOH remained on the electrode; 1 cm of the length of this
 film (which was also 1 cm wide) had a resistance of 4.15, 4.24, and 3.43×10^3 ohms at
 22, 40, and 60° respectively, whence, assuming the resistivity of the electrolyte in
 the film to be equal to the volume resistivity, the film thicknesses at these tempera-
 UDC: 541.136
 Card 1/2

L 40342-66

ACC NR: AP6018985

tures were calculated to be 5.31, 3.5, and 3.0 microns. The resistance (and thickness) of electrolyte films on metals which are passive with respect to hydrogen ionization (e. g., silver, copper passive gold) may be measured in similar fashion by means of a composite, partially immersed electrode, the upper part of which contains the active area (consisting of platinum, for example).

SUB CODE: 07/11/ SUBM DATE: 20Dec65/ ORIG REF: 001/ OTH REF: 002

Card 2/2

SOV/65-58-11-2/15

AUTHORS: Mazitova, F. N. and Paushkin, Ya. M.

TITLE: New Oxidation Inhibitors for Fuels and Additives for Increasing the Thermal Stability of Reactive Fuels (Novyye inhibitory okisleniya topliv i prisadki dlya povysheniya termicheskoy stabil'nosti reaktivnykh topliv)

PERIODICAL: Khimiya i Tekhnologiya Topliv i Masel, 1958, Nr 11, pp 10 - 12 (USSR)

ABSTRACT: Standard additives such as α -naphthol, parahydroxydephenylamine and ionel are not entirely satisfactory. Aminophenols are very effective as anti-oxidants and are practically insoluble in the fuels. Aminoalkyl phenols were described in various publications (Refs.2-4). The authors describe the synthesis of aminoalkyl phenols, alkyl phenols and their esters and tabulate the anti-oxidant properties of these substances (see Table). Monoaminoalkyl phenols, especially 2,6-diamino-4-tert.butyl phenol were found to be more satisfactory than the standard additives. Tests on the inhibition of tar formation in kerosine, which contained cracking components, were carried out on the apparatus LSA. The chemical stability

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SOV/65-58-11-2/15

New Oxidation Inhibitors for Fuels and Additives for Increasing the Thermal Stability of Reactive Fuels

of cracking petroleum was defined according to the induction period. All aminoalkyl phenols were more effective than α -naphthol. The effect of these additives on the formation of deposits in the standard fuel T-1 was also investigated (see Figure). The addition of o-amino-p-tert-butyl phenol reduces the formation of deposits to 1/3rd. There are 1 Figure, 1 Table and 5 References: 3 Soviet and 2 English.

ASSOCIATION: Institut nefti AN SSSR (Institute of Petroleum, AS USSR)

Card 2/2

MAZITOVA, F. N., Candidate Chem Sci (diss) -- "The synthesis and study of the effectiveness of antioxdation additives to fuels". Moscow, 1959. 10 pp (Inst of Petroleum-Chem Synthesis of the Acad Sci USSR), 150 copies (KL, No 24, 1959, 128)

11(4), 5(3)
AUTHORS:

Paushkin, Ya. M., Mazitova, F. N.,
Kurashev, M. V.

SOV/152-59-3-4/25

TITLE:

The Principles and Some Results in the Field of the
Development of Antioxidant Additions to Fuels (Osnovnyye
napravleniya i nekotoryye rezul'taty v oblasti razrabotki
antiokislitel'nykh prisadok k toplivam)

PERIODICAL:

Izvestiya vysshikh uchebnykh zavedeniy. Neft' i gaz, 1959,
Nr 3, pp 67-73 (USSR)

ABSTRACT:

The increasing utilization of the products of thermal cracking
as fuels and the raised demands as to stability require the
investigation and production of new oxidation inhibitors.
Especially important is the thermal stability in flying at
supersonic speed. From foreign publications and patents the
additions of alkylated phenols in the amino group of alkylated
phenols and phenylene diamines are well-known. The authors
examined the efficiency of :

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The Principles and Some Results in the Field of the
Development of Antioxidant Additions to Fuels

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period of stability in min

4-propyl-2-aminophenol	(not given)
4-tertiary butyl-2-aminophenol	270
4-tertiary amyl-2-aminophenol	240
4-tertiary butyl-2,6-aminophenol	540
dimethylphenyl-m-amino-n-oxyphenyl methane	240
dimethyl tertiary butylphenol	120

An addition of 0.04% of the inhibitor to ethylated gasoline B-95/130 was investigated. The period of stability was determined at 110°C on the basis of a beginning turbidity, i. e. the beginning of the formation of decomposition- and oxidation products of tetraethyl lead. The monoamines of the alkyl phenols secure the preservation of gasoline for at least 1 1/2 years. Diaminobutyl phenol shows the highest stabilizing effect. The effect with respect to resinification and formation of precipitation was also investigated. Aminoalkyl phenols showed a good stabilizing effect the best, however, exhibited 2-amino-4-tertiary amyl phenol. A prolongation of the alkyl chain increases the efficiency. Synthetically produced

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The Principles and Some Results in the Field of the
Development of Antioxidant Additions to Fuels

SOV/152-59-3-14/25

aminoalkyl phenols have a high antioxidant effect on
ethylated gasoline, cracking gasoline and jet fuels.
B. L. Kozik, Ye. N. Kornilova, Z. A. Sablina and Ye. G. Chudinova
assisted in the investigation of the synthetically produced
compounds. There are 1 figure, 6 tables, and 11 references,
2 of which are Soviet.

ASSOCIATION: Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti
im. akad. I. M. Gubkina (Moscow Institute of Petroleum Chemical
and Gas Industry imeni akad. I. M. Gubkin)

SUBMITTED: September 29, 1958

Card 3/3

5(3)

AUTHORS:

TITLE:

Mazitova, F. N., Paushkin, Ya. M.

SOV/20-125-5-22/61

The Influence of the Structure of Nitro-compounds
of the Aromatic Series on the Rate of Catalytic Reduction
(Vliyaniye stroeniya nitrosoyedineniy aromaticeskogo
ryada na skorost' kataliticheskogo vosstanovleniya)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 125, Nr 5,
pp 1033-1036 (USSR)

ABSTRACT:

The reaction mentioned in the title has been known since 1872 (Ref 1). Other research workers (Refs 3, 4) showed that the existence of such substituents as OH, Cl, CH₃ and COOH at the nucleus do not influence the rate of hydrogenation of the compounds mentioned in the title at room temperature and atmospheric pressure. There are, however, no publications available on the nitroalkyl-phenols under the conditions mentioned. The authors synthesized several nitro-compounds with alkyl groups at the nucleus (Table 1) in order to investigate the problem mentioned in the title. Furthermore, purified o-nitrophenol (melting point 47°) and nitrobenzene (boiling point 209°) were reduced. Previously purified

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The Influence of the Structure of Nitro-compounds
of the Aromatic Series on the Rate of Catalytic Reduction

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hydrogen was blown through the alcoholic solution of the compound to be reduced, which contained a certain quantity of platinum catalyst. The experiment lasted until the hydrogen absorption ceased. The hydrogen consumption agreed in all experiments with the theoretically calculated quantity. The reaction products - corresponding aromatic amines - were isolated from the filtrate under vacuum after the solvent had been distilled off. They did not contain by-products (Table 2). Figure 1 shows the rates of hydrogen absorption in the reduction of the individual nitro-products. This rate is constant for each compound until the reduction of the main mass of the substance concerned has taken place (85 - 90 %). Table 3 shows the values of the average rates in each individual case. They characterize indirectly the rates of reduction. This indicates that these rates are practically equal for nitrobenzene and nitrophenol (Fig 1, Curves 1 and 2) (corresponds to Ref 4). However, the rate is reduced by approximately 42 % during the transition from nitrobenzene to nitrobutyl-benzene. In the case of nitrophenol and its alkyl derivatives the alkyl group acts

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The Influence of the Structure of Nitro-compounds
of the Aromatic Series on the Rate of Catalytic Reduction

SOV/20-125-5-22/61

in a similar manner upon the rate of reduction. The rate mentioned is still more reduced by introducing another alkyl group into the nucleus. This is still more increased by replacing one of the hydrogen atoms of the nitroalkyl-phenol nucleus by a phenyl group. Thus, the rate of reduction in the series of nitro-alkyl-phenols decreases with the increase and complication of the structure of the alkyl-substituting group. The authors try to explain this phenomenon by the resulting steric inhibitions. There are 1 figure, 3 tables, and 4 references, 3 of which are Soviet.

ASSOCIATION: Institut neftekhimicheskogo sinteza Akademii nauk SSSR
(Institute of Petroleum-chemical Synthesis of the Academy of Sciences, USSR)

PRESENTED: November 3, 1958, by A. V. Topchiyev, Academician

SUBMITTED: November 3, 1958

Card 3/3

MAZITOVA, F.N.; YERMAKOVA, S.K.; VIROBYANTS, R.A.

Analysis of gaseous hydrocarbons by adsorption chromatography
on aluminum oxide. Khim.i tekhn.topl.i masel 7 no.4:66-69 Ap
'62. (MIRA 15:4)

1. Institut organicheskoy khimii AN SSSR, g. Kazan'.
(Hydrocarbons) (Gas chromatography)

MAZITOVA, F.N.; YERMAKOVA, S.K.

Use of siloxane oil as a stationary phase for gas-liquid
chromatography of C₂ - C₆ hydrocarbons. Khim.i tekhn. topl. 1
masel 7 no. 6:64-65 3s '62. (MIRA 15:7)
(Hydrocarbons)
(Chromatographic analysis)

MAZITOVA, F.N.; VIROBYANTS, R.A.; YERMAKOVA, S.K.

Analysis of light petroleum hydrocarbons by means of gas-liquid chromatography. Izv. AN SSSR. Otd. khim. nauk no. 9:1546-1550 S '62. (MIRA 15:10)

1. Institut organicheskoy khimii AN SSSR, Kazan'.
(Hydrocarbons) (Gas chromatography)

ACCESSION NR: AP3000131

S/0062/63/000/005/0943/0945

AUTHOR: Maxitova, F. N.; Paushkin, Ya. M.

TITLE: Synthesis of nitroderivatives of alkylated phenols

SOURCE: AN SSSR. Izvestiya. Otdeleniye khimicheskikh nauk, no. 5, 1963, 943-945

TOPIC TAGS; aminoalkylphenols, antioxidant additives, 2-nitro-t-alkyl-phenol, 2,6-dinitro-t-alkyl phenols

ABSTRACT: The title compounds are intermediates for the synthesis of aminoalkyl phenols which are effective antioxidant additives. They were prepared by the reaction of p-tert-alkyl phenols in benzene with an excess of a solution of nitric acid ranging from 24.8 to 55.8% in concentration. Three 2-nitro and two 2,6-dinitro-t-alkyl phenols were prepared in 63-74% yields. Physical constants and analyses are given. Orig. art. has: 1 table.

ASSOCIATION: Institut organicheskoy khimii Akademii nauk SSSR, Kazan' (Institute of Organic Chemistry, Academy of Sciences. SSSR)

Card, 1/2

ACCESSION NR: AF3000131

SUBMITTED: 26Dec62

SUB CODE: CH

DATE ACQ: 12Jun63

NO REF SOV: 003

ENCL: 00

OTHER: 003

Cord 2/2

PAUSHKIN, Ya.M.; MAZITOVA, F.N.

Synthesis of 2-amino-4-tert-alkylphenols. Izv. AN SSSR. Otd.khim.nauk
no.6:1127-1128 Je '63. (MIRA 16:71)

1. Institut organicheskoy khimii AN SSSR, Kazan'.
(Phenol)

MAZITOVA, F.N.; DUROVA, O.S.

Reducing alkylation of p-aminophenol. Izv. AN SSSR. Ser. khim.
no.11:2063-2064 N '63. (MIRA 17:1)

1. Institut organicheskoy khimii AN SSSR, Kazan'.

MAZITOVA, F.N.; RYZHMANOV, Yu.M.; YABLOKOV, Yu.V.; DUROVA, O.S.

Electron paramagnetic resonance study of the oxidation of
aminoalkyl phenyls by benzene peroxide. Dokl. AN SSSR 153 no.2:
354-356 N '63. (MIRA 16:12)

1. Institut organicheskoy khimii AN SSSR, Kazan', i Fiziko-tekhnicheskij institut Kazanskogo filiala AN SSSR. Predstavleno akademikom B.A.Arbutovym.

8/0204/64/004/002/0323/0328

ACCESSION NR: AP4032518

AUTHOR: Mazitova, F. N.; Durova, O. S.; Bukhryakova, V. V.

TITLE: Synthesis of polyfunctional inhibitors for the oxidation of fuels

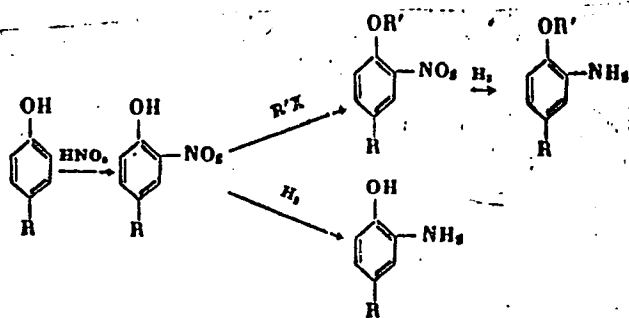
SOURCE: Neftekhimiya, v. 4, no. 2, 1964, 323-328

TOPIC TAGS: oxidation inhibitor, fuel oxidation inhibitor, polyfunctional inhibitor, aminoalkylphenol, synthesis, characterization, nitration, etherification, catalytic reduction

ABSTRACT: Aminoalkylphenols had been found effective oxidation inhibitors for fuels. A number of such compounds containing hydroxy, amino and alkyl groups were synthesized and characterized in this work. The synthesis was according to the following equation:

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The alkylphenols were nitrated (24.8% HNO_3) at 13-25C for 6 hours, etherified with dimethylsulfate and alkyl halide at 45-100C to obtain 20-45% yield of the corresponding ether, and catalytically reduced at 50-80C under 20-30 atm. pressures with platinum on carbon to obtain 69-94% yield of the amino derivative. Several new compounds were made: the methyl and ethyl ethers of o-nitro-p-tert.butylphenol and -p-tert. amyl phenol, and the methyl and ethyl ethers of the o-amino-p-tert. butylphenol and -p-tert.amylphenol. Orig. art. has: 1 table and 1 equation.

Cord 2/3

ACCESSION NR: AP4032518

ASSOCIATION: Institut organicheskoy khimii AN SSSR, Kazan' (Institute of Organic Chemistry, AN SSSR)

SUBMITTED: 15Apr63

SUB CODE: FP, OC

NO REF SOV: 002

ENCL: 00

OTHER: 002

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L 13092-66 EWT(1)/EWT(m)/EWP(j) IJP(c)/RPL WW/GG/EM
 ACC NR: AP6002076 SOURCE CODE: UR/0204/65/005/006/0904/0908 57
 AUTHOR: Mazitova, F. N.; Ryzhmanov, Yu. M.; Shagidullin, P. P.; Lamanova, I. A. 56
 ORG: Institute of Organic Chemistry, AN SSSR, Kazan (Institut organicheskoy khimii
 AN SSSR); Physicotechnical Institute of Kazan, AN SSSR (Kazanskiy fiziko-
 tekhnicheskii institut AN SSSR) 17.11.55
 TITLE: The EPR method of investigating the mechanism of antioxidant action
 SOURCE: Neftekhimiya, v. 5, no. 6, 1965, 904-908
 TOPIC TAGS: EPR, ~~antioxidant additive~~, free radical, oxidation inhibition, benzoyl
 peroxide, EPR spectrum, spectrometer, ester, phenol, benzene
 ABSTRACT: Oxidation of the methyl ester of o-amino-p-tert-butylphenol¹ by benzoyl
 peroxide was studied in anhydrous benzene solution at room and slightly above room
 temperatures using EPR technique for characterization of the intermediate products.
 The object of the work was to study antioxidant action in the methyl ester of o-
 amino-p-tert-butylphenol. EPR spectra were taken at room temperature using a PE-
 1301 radiospectrometer. The ester to peroxide molar ratios were: 1:1/8, 1:1/2, and
 1:1. UDC: 542.943.82:541.124:538.56:535.34
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1:1. It was found that the degree of ester oxidation is a function the amount of peroxide used. The EPR spectra indicated formation of free radical/intermediates at all reaction stages. For the ester to peroxide ratio of 1:1 the free radical formed of the formula (see Fig. 1) was isolated by chromatography using Al_2O_3 packing. The EPR spectrum of this radical is shown in Fig. 2. Orig. art. has: 4 figures.

SUB CODE: 07/ SUBM DATE: 25Dec64/ ORIG REF: 004/ OTH REF: 003

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ACC NR: AP6002076

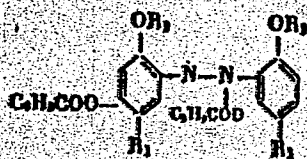


Fig. 1. The free radical formed during oxidation of the methyl ester of o-amino-p-tert-butylphenol with an equimolar amount of benzoyl peroxide.

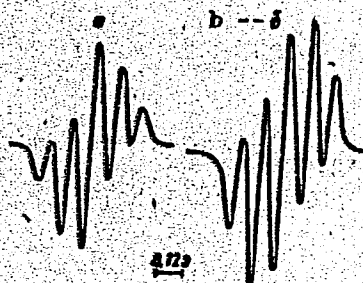


Fig. 2. The EPR spectrum of oxidation of the methyl ester of o-amino-p-tert-butylphenol obtained after 20 hr oxidation at equimolar ratio of ester to peroxide.

a - oxidation performed in an evacuated ampoule; b - stable oxidation product (free radical) isolated chromatographically.

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MAZITOVA, F.N.; RYZHMANOV, Yu.M.

Electron paramagnetic resonance study of the oxidation of the
methyl ether of o-amino-p-tert-butylphenol. Dokl. AN SSSR 161
no.6:1346-1348 Ap '65. (MIRA 18:5)

1. Kazanskiy fiziko-tekhnicheskiy institut AN SSSR i Institut
organicheskoy khimii AN SSSR, Kazan'. Submitted September 26,
1964.

MAZITOVA, F.S.

Using heat pumps in district heating systems. Izv.Otd.est.
nauk AN Tadsh.SSR no.10:3-12 '55. (MLRA 9:10)

1. Otdel energetiki AN Tadshikskoy SSR.
(Heat pumps) (Heating from central stations)

MAZITOVA, F.S.

Diagrams, parameters, and types of heat pumps used in single-pipe district heating systems. Izv.Otd.est. nauk AN Tadsh.SSR
no.10:13-26 '55. (MLRA 9:10)

1. Otdel energetiki AN Tadzhikskoy SSR.
(Heat pumps) (Heating from central stations)

MAZITOVA, F.S.; OSIGHEVA, M.A.; SEMENOV, A.A.

Developmental trends and principle arrangements for supplying
gas to cities in Tajikistan. Izv.Otd. est. nauk AN Tadzh.SSR
no.22:147-159 '57. (MIRA 11:8)

1.Otdel energetiki AN Tadzhikskoy SSR.
(Tajikistan--Gas, Natural)

MAZITOVA, F.S.; SEMENOV, A.A.

Selecting the course of development of the fuel trade in
southern Tajikistan. Izv.Otd.est.nauk AN Tadzh.SSR no.2:
67-79 '58. (MIRA 13:4)

1. Otdel energetiki AN Tadzhikskoy SSR.
(Tajikistan--Fuel)

MAZITOVA, F.S.; OSICHEVA, M.A.

Power resources and economic characteristics of southern Tajikistan. Izv. Otd. geol.-khim. i tekhn. nauk AN Tadzh. SSR no.1: 25-38 '59. (MIRA 14:8)

1. Otdel energetiki AN Tadzhikskoy SSR.
(Tajikistan--Natural resources)

MAZITOVA, P.S.; OSICHEVA, I.A.

Power resources and economic features of the Gorno-Badakhshan
Autonomous Province. Trudy Otd. energ. AN Tadzh. SSR 1:3-13
'60. (MIRA 14:2)

(Gorno-Badakhshan Autonomous Province—Power resources)

7

POROSHIN, K.T., akademik, red.; MAZITOVA, F.S., kand. tekhn. nauk, red.;
VINOGRADSKAYA, S.N., red. izd-va; KOTSAHENKO, Ye.G., red. izd-va;
GELLER, S.P., tekhn. red.

[The Nurek Hydroelectric Power Station and objectives of Soviet
science] Nurekskaya GES i zadachi nauki. Stalinabad, Izd-vo Akad.
nauk Tadzhikskoi SSR, 1961. 155 p. (MIRA 14:11)

1. Akademiya nauk Tadzhikskoy SSR, Dushanbe. 2. Vitse-prezident AN
Tadzhikskoy SSR (for Poroshin). 3. Otdel energetiki AN Tadzhikskoy
SSR (for Mazitova).

(Nurek Hydroelectric Power Station)

MAZITOVA, F.S., kand.tekhn.nauk

Work of the conference on the problem "The cascade of the Vakhsh hydroelectric power stations and its role in the power engineering of Central Asia." Izv. Otd. geol.-khim. i tekhn. nauk AN Tadzh. SSR no.2:129-134 '61. (MIRA 15:1)

1. Zaveduyushchaya otделom energetiki AN Tadzhikskoy SSR.
(Vakhsh Valley--Hydroelectric power stations)

MAZITOVA, Tamara Georgiyevna; KOCHEROV, V., red.; BABAKHANOV, A.,
tekhn. red.

[The highest living standard] Samyi vysokii zhiznennyi
uroven'. Tashkent, Gosizdat UzSSR, 1962. 84 p. (Reshenia
XXII s"ezda KPSS v deistvii) (MIRA 15:7)
(Uzbekistan--Collective farms)
(Uzbekistan--Cost and standard of living)

MAZIVETSKIY, Ya.P.

The 1722 semiautomatic profiling lathe. Stan.1 instr. 27 no.9:1-5
S '56. (MLSA 9:11)

(Lathes)

AUTHORS: Gusev, B.Ya. (Candidate of Technical Sciences), and
Maziya, L.V., (Engineer) SOV/110-59-7-13/19

TITLE: An Investigation of Transient Processes in a Two-Stage
Longitudinal-Field Amplidyne by Electronic Analogue
Methods (Issledovaniye perekhodnykh protsessov v
dvukhstupenchatom elektromashinnom usilitele prodol'nogo
polya pri pomoshchi elektronnoy modeliruyushchey ustanovki)

PERIODICAL: Vestnik elektropromyshlennosti, 1959, Nr 7, pp 58-63 (USSR)

ABSTRACT: This article describes the use of an analogue computer to study the influence on the transient processes and amplification factor of a two-stage longitudinal field amplidyne of the following factors: the method of connecting the self-excitation windings, the adjustment of the self-excitation circuit, non-linearity of the magnetisation curve, compensation of armature reaction due to first stage currents, and compensation of armature reaction in the first stage. A type MN-8 computer was used, in which continuously-operating elements integrate differential equations. The differential equations of the amplidyne may be derived from its equivalent circuit. Fig 1a shows the equivalent circuit of a two-stage

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 An Investigation of Transient Processes in a Two-stage Longitudinal-Field Amplidyne by Electronic Analogue Methods

amplidyne with series connection of the self-excitation windings on the assumption of complete compensation of armature reaction in the first and second stages, with no counteracting winding present and assuming a linear no-load curve. The transient process equations for this case are given and a block diagram of the computer set-up is given in Fig 2. Curves of the load current as function of time obtained in this way are seen in Fig 3. It is concluded that on a purely resistive load the amplidyne with the series self-excitation winding operates faster because the time-constant of the amplidyne is less when the series winding is used. With an inductive load, however, the series winding amplidyne is slower than the parallel-winding type because the increase in the main field of the former is governed by the increase in the load current. An amplidyne with series self-excitation winding operating on a purely resistive load was used to study the influence of the adjustment of the self-excitation circuit on the transient process, and the necessary equations for this case are derived. The

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corresponding voltage/time curves are given in Fig 4; a factor k given by Eq (13) is introduced and the curves show that as this factor is increased the amplification factor of the amplidyne increases proportionately to k^2 , whilst the transient process time is increased in proportion to the square root or cube root of k . The method of investigating the non-linearity of the no-load curve is explained and the curves obtained are plotted in Fig 5. In this figure, Curve 2 corresponds to a constant control voltage and Curve 1 is derived on the assumption that the no-load curve is linear. It will be seen that the non-linearity of the magnetisation curve reduces the amplification factor of the amplidyne and reduces the transient process time by a factor of 1.25. Equations are derived to investigate the influence of compensation of armature reaction. Load-current/time curves for various cases are plotted in Fig 6 and it is shown that the degree of compensation of the first stage armature reaction has little influence on the speed of the amplidyne but considerably affects its amplification

Card 3/5

SOV/110-59-7-13/19
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factor. The best adjustment of the first stage was found to be over-compensation on one axis and under-compensation on the other. The influence of the counter-acting windings was studied and the results are plotted in Fig 5, Curves 3 and 4. It is shown that the use of a counter-acting winding can considerably increase the amplification factor without affecting speed. In order to check the procedure, tests were made on a 45 kW amplidyne type EMU-550 manufactured by the Khar'kov Electro-Mechanical works. Technical data of the machine are appended. The test results are plotted as bold lines in Fig 7 and the calculated curves are shown dotted. Agreement is satisfactory. The work does not permit of final conclusions about the best way of connecting amplidyne windings. However, pending the study of other combinations of windings, certain conclusions can be drawn from the work. It is best to use parallel self-excitation windings because the operation is faster with a partially inductive load. The amplification factor is considerably influenced by adjustment of the self-

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SOV/110-59-7-13/19

An Investigation of Transient Processes in a Two-stage Longitudinal-Field Amplidyne by Electronic Analogue Methods

excitation circuit. If the speed of rotation of the amplidyne varies widely, a longitudinal-field amplidyne should not be used. Non-linearity of the magnetisation curve has little influence over the working range of the amplidyne.

There are 8 figures, 1 table and 4 Soviet references.

Card 5/5

8(3)

AUTHORS:

Maziya, L. V., Sakayev, F. Sh. (Moscow)

SOV/105-59-10-11/25

TITLE:

Modelling of the Electric Drive of the Screws of the Atomic Ice-breaker "Lenin"

PERIODICAL:

Elektrichestvo, 1959, Nr 10, pp 56-62 (USSR)

ABSTRACT:

This article contains the results obtained from investigations of the modes of operation of the automatic electric drive of the screws of the atomic ice-breaker "Lenin". The investigations were made on a universal electronic simulator of the MN-8 type with the participation of V. N. Vladimirov. Figure 1 shows the principal circuit diagram of the screw-motor speed regulation for which calculations were made. The speed was regulated by changing the control-winding voltage of the rotary amplifier of the generator. The load characteristics of the screw runs between two limiting curves, the one holding for the immobile ship, the other for the case in which the ship moves in the free water. The following modes of operation were investigated: start when the ship does not move, reversal under the same conditions, and reversal when the ship moves in the free water. The authors outline the requirements to be met by transients of the system. The following problems were posed when investigating the

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Modelling of the Electric Drive of the Screws
of the Atomic Ice-breaker "Lenin"

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non-steady modes of operation of the electric drive on an electronic simulator: explanation of the manner in which the system is stabilized and determination of the parameters of the stabilizing transformers; selection of the parameters of rigid and elastic feedbacks, of the cutoff voltage, the ratio of the control-winding voltages of the rotary amplifier (in order to guarantee the required quality of transients), and the motor speed in the various transient modes of operation; determination of amperages and voltages of the system during adjustment and operating troubles. The initial equations for the transients are written down in consideration of the nonlinearity of the magnetization curves of electric machines. Herefrom the set of equations for the solution of the problems posed may be obtained on simulators. The block diagram of the set of computer elements is shown and described in figure 2. Finally, the results of investigation of the afore-mentioned problems are given. Herefrom it followed that the scheme used guarantees the necessary characteristics of the electric drive. There are 5 figures and 5 Soviet references.

SUBMITTED:
Card 2/2

May 28, 1959

Восстановление электротехнических систем по автоматическим принципам
 восстановления систем по автоматическим принципам
 М. М. Мусатов, 1959

Электротехническое восстановление систем по автоматическим принципам
 (Electric Drive and Automation in Industrial Systems; Transactions of the Com-
 furance) Moscow, Gosizdat, 1960. 470 p. 11,000 copies printed.

General Eds.: I.I. Petrov, A.A. Sivtsov, and M.G. Chilikin; Eds.: I.I. Sud, and
 I.P. Lashin; Tech. Eds.: I.P. Verbitskiy, and G.Ye. Larionov.

PURPOSE: The collection of reports is intended for the scientific and technical
 personnel of scientific research institutes, plants and schools of higher
 education.

CONTENTS: The book is a collection of reports submitted by scientific workers at
 plants, scientific institutes and schools of higher education at the third
 Joint All-Union Conference on the Automation of Industrial Processes in Machine
 Building and Automated Electric Drives in Industry held in Moscow on
 May 12-16, 1959. The Conference was called by the Academy of Sciences USSR, the
 Gosplan USSR (State Planning Commission USSR), the GVTI USSR, the Gosdizvestrom
 USSR (State Scientific and Technical Information Center USSR) on Automation and
 Machine Building, and the National'nyy Institut SSSR po avtomaticheskoy uprav-
 leniyu (USSR National Committee on Automatic Controls) and prepared by the
 Nauchno-Issledovatel'skiy Komitet po avtomaticheskoy upravleniyu (Scientific
 and Technical Committee on Automated Electric Drives), the VNI (Moscow Institute
 of Engineering of Sciences USSR, and the Institute of Automation and Telemekhanics)
 of the Academy of Sciences USSR, and the Institute of Technology of Machine-
 Building of the Institute of Machine Building of the Academy of Sciences USSR.
 It was the purpose of the Institute of Machine Building of the Academy of Sciences USSR
 to ensure a relatively systematic and comprehensive collection of scientific and practical
 problems relating to electric drives and automatic controls of industrial machi-
 nery used in various branches of industry. Basic problems of automatic electric
 drive and their solution are outlined. The book also contains articles on auto-
 matic control systems, including systems with semiconductor devices
 and magnetic amplifiers, and to computers intended both for the analysis and the
 synthesis of linear and nonlinear automatic regulation and control systems. Re-
 ports already published in journals or official publications have been considered.
 The articles which have appeared in volumes V of VII of the Transactions
 of the International Association of Scientific and Technical Workers are mentioned.
 References are given to the literature of the subject.

THE
 PRACTICE OF ELECTRIC DRIVE AND AUTOMATION OF CONTROL

Lerch, G.M., Engineer. Programmed Control of Rolling Mills for Variable
 Cross-Section Rods of Revolution

284

Yu. V. Belykh, B.S., Engineer. Simulation of Metallurgical Drives

286

Lednevskiy, A.M., Engineer. Calculation and Investigation of a Flying
 Linear Servomotor by Means of an Electronic Simulator

290

Dunayev, M.M., Engineer. Automation of the Collection and Weighing of
 No. 1 MG Blast Furnace Charge

294

PART III. ELECTRIC DRIVE FOR MECHANISMS OF VARIOUS KINDS OF INDUSTRY

Sokolov, M.M., Candidate of Technical Sciences, Doctor. Present State and
 Prospects for Development of Electric Drives for General Industrial
 Mechanisms

299

Korotkiy, I.I., I.A. Kolesnikov, V.I. Kravchenko, and G.A. Kozlov.
 Engineers. Automated Electric Drive of the Propulsion Installation on the
 Atomic Submarine "Leningrad"

301

Belitskiy, V.I., and I.S. Babayev, Engineers. Investigation of means of
 limiting the power of the operating conditions of the Propulsion-Installation In-
 stalled Electric Drive on the Atomic Submarine "Leningrad"

305

Korotkiy, I.I., V.I. Kravchenko, and V.I. Kuznetsov, Candidates of Technical
 Sciences, M.M. Sokolov, Doctor, Candidate of Technical Sciences, and
 V.I. Kolesnikov and V.I. Kolesnikov, Engineers. Comparison of Certain
 Electric Drive Systems of the 20-6 Reactor

313

Korotkiy, I.I., V.I. Kravchenko, and V.I. Kuznetsov, Engineers. Automated
 Electric Drive Systems of Nuclear Reactors and the Results of Their Indus-
 trial Application

319

Korotkiy, I.I., V.I. Kravchenko, and V.I. Kuznetsov, Engineers. Results of the
 Industrial Investigation of Automated D-C Electric Drives of the 20-6
 With Magnetic Amplifiers

324

Chibrikov, A.P., Doctor, Candidate of Technical Sciences. Use of Standard
 Electric Machinery and Magnetic Amplifiers as Motor-Generator Drive Regula-
 tors for Fine Starting Machinery and Reactors

329

MAZIYA, L.V.

S/569/61/005/000/002/002
D201/D302

AUTHORS:

Bershadskiy, V.L., Kalashnikov, V.K., Kryazhevskiy, V.V.,
Maziya, L.V. and Popov, G.A. (USSR)

TITLE:

Automatic electric propeller drive of the atomic ice-
breaker "Lenin"

SOURCE:

International Federation of Automatic Control. 1st Con-
gress, Moscow, 1960. Avtomatizatsiya proizvodstvennykh prot-
sessov; mashinostroyeniye, elektroenergetika, elektropri-
vod, transport. Moscow, Izd-vo AN SSSR, 1961. (Its: Trudy
(v.5)), 301-315

TEXT: The authors describe the electric propulsion system of the ice-
breaker "Lenin", give the static characteristic of the propeller drive
and the graphs of transients as obtained from the system evaluation on
an analogue computer and obtained from the performance of the actual in-
stalled system. The "Lenin" has steam turbines as the primary motors.
These operate a d.c. generator and final d.c. motor drives. The

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Automatic electric ...

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following are the characteristics of the ship: displacement - 16,000 tons; maximum length - 134 m; maximum width - 27.6 m; turbine power - 44,000 H.P.; maximum speed - 18 knots; number of propellers - 3; revolutions at maximum ship speed - 195 r.p.m. for the center and 215 r.p.m. for the side propellers; period of autonomy - 1 year. The electric drive system feeds the three propeller d.c. motors from four turbo-generator aggregates, operating at constant speed. The total turbo-generator power is divided between the propeller shafts in the ratio 1 : 2 : 1, so that the center propeller, least exposed to damage, absorbs half the total system power. The drive uses 1200 v.d.c. The propeller motors are of a twin-armature type, 9800 H.P. per armature of the center propeller and 4900 H.P. per armature of the side shafts motors. The excitation generators, also of a twin-armature type have a power of 1920 kw per armature, at the armature voltage of 600 v and 595 r.p.m. Each turbo-generator feeds simultaneously three propeller shaft motors. The center propeller can be driven even when only one turbine is in operation. The armatures of each propeller shaft motor form, together with their

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Automatic electric ...

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generators, two independent circuits. The nominal parameters of main machines are chosen for the heaviest of the ship drive situations, i.e. when the ship is stationary with respect to water. The control system was chosen from the point of view of limiting the reverse power generated in braking. This has been achieved by a voltage feedback in the control generator winding. In analyzing the system on an analogue computer it was found that without the feedback stabilizing networks the system becomes unstable at an oscillating frequency of about 1c/s. The feedbacks required were found to be variable voltage feedbacks in the amplidyne of the generator exciter and motors together with a variable main current feedback. The time of transient with ship not moving is 10 sec., when reversing - 27 sec. and when reversing in free water - 35 sec. The switching in the main, excitation and control circuits is by means of selective generator switches. Each propeller has 4 selective switches, each having 3 main contacts at 6400 amp., for the center and at 3200 amp for the side propellers. Remote control of the propulsion system is used. In discussion, questions were put by G.A. Popov; I.P. Freydzon (USSR) rounded up the discussion. There are 7 figures, 1 table and 3 Soviet-bloc references.

Card 3/3

KRYLOV, O.A.; MAZIYA, L.V.

Modeling of a stabilizing transformer. Elektrichestvo
no.7:40-44 J1 '62. (MIRA 15:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut elektromekhaniki.
(Electric transformers--Electromechanical analogies)
(Electric driving)

PATRUNOV, F.G., inzh.; SVIATOSLAVSKIY, V.A., inzh.; MAZIYA, L.V., inzh.

Study of a generator-motor system with an exciter and amplidyne.
Vest.elektroprom. 33 no.12:36-40 D '62. (MIRA 15:12)
(Electric machinery)

MAZIYA, L.V., kand. tekhn. nauk; KRYLOV, O.A., inzh.

Structural diagrams for mathematical modeling of stabilizing
devices of electric drives. Elektrotehnika 34, no.10:61-63
(MIRA 16:11)
0 '63.

MAZNEVA, P.P.

USSR/Cultivated Plants. - Technical. Oleaginous. Sugar-Bearing. L-5

Abs Jour : Ref Zhur - Biologiya, No 16, 25 Aug 57, 69306

Author : Mazieva, P.P.

Title : ~~Cultivation of~~ Sunflower Seed Under Irrigating Conditions of Grosnensky District.

Orig Pub : V sb.: Kratkiy otchet o nauch.-issled. rabote Vses. n.-i. in-ta maslich. i efiromaslich. kultur VASKhNIL za 1955 g. Krasnodar, 1956, 167-170.

Abst : In 1952 to 1955 on collective farms of the Sunzhensky Region of Grosnensky District, a study was conducted in nutrition and effectiveness of fertilizers in cultivating sunflowers while being irrigated. Even without fertilizers, irrigation increased the yield $2\frac{1}{2}$ times. The use of customary doses of complete fertilization gave very effective results. The best area for feeding in conjunction with irrigation is 1600 cm^2 (60 thousand plants per hectare).

Card 1/1

MAZKA, P.I., inzh.

Assembly line for the automatic welding of gondola car side walls.
Svar.proizv. no.6:26-27 Je '60. (MIRA 13:7)

1. Kryukovskiy vagonostroitel'nyy zavod.
(Railroads--Freight cars--Welding)
(Assembly-line methods)

BUTUZOV, A.I.; MAZKA, S.A.; OSNACH, A.M.; ROMANOVSKIY, S.A.; FAYNZIL'BERG, S.N.

Utilizing the physical heat of blast furnace slags. Stal' 22
no.7:668-670 JI '62. (MIRA 15:7)
(Blast furnaces) (Heat regenerators)

✓ Cyclic arylazo-2-diketones. III. Condensation of dimedon with aromatic diazo compounds. B. Gudrilevica, G. Vanags, R. Fridmane, L. Markalke, and E. Ture. Latvian PSR Zindigu Akad. Vēstis 1959, No. 7, 81-4 (in Russian); cf. CA 53, 16046c; following abstr.—An alk. soln. of 2.8 g. dimedon (I) added to a diazotized soln. of 3.6 g. sulfanilic acid at 1-5°, stirred 2 hrs., acidified to pH 5 with HCl, and the product salted out yielded 4.4 g. Na salt of dimedonylazophenyl-p-sulfonic acid (II), m. about 880° (decomn.). The EtOH soln. of the Na salt of II when

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dimedonylazophenyl-sulfonic acid (II), m. about 330° (decompn.). The EtOH soln. of the Na salt of II when cooled with NaOH yielded the di-Na salt of II. Similarly treated, I and sulfanilamide yielded dimedonylazophenyl-sulfamide (III), red crystals, m. 250°. III (0.25 g.) in EtOH refluxed 2 hrs. with 0.56 g. NH₂OH.HCl (IV), cooled, filtered and recrystd. from glacial AcOH yielded 0.1 g. III oxime, red crystals, m. 230° (decompn.). III (1 g.), 2.5 g. IV, and 45 ml. EtOH refluxed 2.5 hrs., cooled, filtered, the filtrate dil'd. with H₂O, and the resulting ppt. recrystd. from EtOH yielded III dioxime, yellow crystals, m. 220-1° (decompn.). A series of derivs. was prep'd. (and product, appearance and m.p. given): phenylazodimedon (V), orange-red, 142°; Na salt of V, orange-red, ---; 2-methyl-phenylazodimedon (VI) semicarbazone, yellow needles, 217-18°; VI disemicarbazone, orange, 253°; 3-methyl-phenylazodimedon (VII), ---, 102-3° (semicarbazone, orange, 225-6°; disemicarbazone, orange, 265-6°); 4-methylphenylazodimedon (VIII) semicarbazone, orange,

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CIA-RDP86-00513R001033130001-9

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001033130001-9"

GUIRINIETSE, E.; VANAG, G.; MAZKAL'KE, L.

Sulfonation of β -diketones. Part 10: Sulfonation of dimedon.
Zhur.ob.khim. 30 no.6:1904-1911 Je '60.
(MIRA 13:6)

1. Rzhskiy politekhnicheskii institut.
(Cyclohexanedione) (Sulfonation)

GUDRINIYETSE, B.; VANAG, G.; MAZKAL'KE, L.

Sulfonation of β -diketones. Part 11: Derivatives of 2-dimadon-
sulfonic acid. Zhur.ob.khim. 30 no.7:2379-2387 J1 '60.
(MIRA 13:7)

1. Rishskiy politekhnicheskii institut.
(Cyclohexanesulfonic acid--Spectra)
(Cyclohexanedione--Spectra)

MAZKEVICH, P. P., MININA, E. G. and IGRITZKAYA, E. B.

"Effect of soil and air humidity and of the temperature of the air on the formation of spikelets in the ear of wheat." (Compt rend. Acad. Sci. URS.S., 1940, 26, pp 271-274).

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COUNTRY : USSR
 CATEGORIES : Cultivated Plants - Industrial, Oleiferous, Sugar. M
 ASS. NO. : Sakharova, 1957, No. 11, 17-22
 AUTHOR : Ramenskaya, A. L.
 TITLE : Varieties of Ramenskaya Station.

ASS. NO. : Sakharova, 1957, No. 11, 17-22

ABSTRACT : In the past 20 years, the sugar yield from 1 ha has increased in USSR by 3.3 c and the sugar content by 0.7%. Considerable success has been achieved at Ramenskaya experiment and selection station in bringing out highly productive varieties with an increased sugar content in the sugar beets of which P06, P931, P632, P1537 and P023 have been widely adapted regionally. Variety P023 stands out on account of high sugar content. Of the total issue of beet seeds in USSR, up to 50-60% of the seeds of these varieties are issued for initial sowings. Beet varieties

Card: 1/2

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COUNTRY : USSR
 CATEGORY : Cultivated Plants - Industrial, Oleiferous, Sugar. M
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 AUTHOR :
 INST. :
 TITLE :

ORIG. PUB. :

ABSTRACT : of Ramonskaya station are distinguished by great vigor of the initial formation of the roots and by relatively fast maturing. Therefore, they are demanding in regard to hoeing in early periods. They are also demanding in regard to fertilizers, especially the basic fertilization, and in regard to the background of heightened fertility. Ramonskiy varieties, especially P023, P931 and P06 are responsive to enlarged feeding areas and are suitable for the cultivation with checkrow and square spacing of the plants. -- N. I. Orlovukiy

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(Biological research) (Sugar beet breeding)

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Leninskoy premii, red.; MAZIMOV, A.L., akademik, red.;
MAYSURIYAN, N.A., akademik, red.; VASILENKO, P.M., akademik,
red.; VASILENKO, P.M., akademik, red.; MANZHELIY, I.I., red.;
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V.I.Lenina. 2. Uchenyy sekretar' seksii tekhnicheskikh kul'tur
Otdeleniya zemledeliya Vsesoyuznoy akademii sel'skokhozyaystven-
nykh nauk im. V.I.Lenina (for Manzheliy).
(Sugar beet breeding)